

<110> Victor Roschke

<120> 29 Human Cancer Associated Proteins

<130> PA004P1

<150> unassigned

<151> 2001-12-21

<150> PCT/US00/23794

<151> 2000-08-30

<150> 60/152,296

<151> 1999-09-03

<150> 60/158,003

<151> 1999-10-06

<160> 138

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

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<210> 2

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> Site

<222> (3)

<223> Xaa equals any of the twenty naturally occurring L-amino acids

<400> 2

Trp Ser Xaa Trp Ser

1

5

<210> 3

<211> 86

<212> DNA

<213> Artificial Sequence

<220>

<221> Primer\_Bind

<223> Synthetic sequence with 4 tandem copies of the GAS binding site found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)), 18 nucleotides complementary to the SV40 early promoter,

and a Xho I restriction site.

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cccgaaaatat ctgcctatctc aattag	86	
<210> 4		
<211> 27		
<212> DNA		
<213> Artificial Sequence		
<220>		
<221> Primer_Bind		
<223> Synthetic sequence complementary to the SV40 promoter; includes a Hind III restriction site.		
<400> 4		
gcggcaagct ttttgcaaag cctaggc	27	
<210> 5		
<211> 271		
<212> DNA		
<213> Artificial Sequence		
<220>		
<221> Protein_Bind		
<223> Synthetic promoter for use in biological assays; includes GAS binding sites found in the IRF1 promoter (Rothman et al., Immunity 1:457-468 (1994)).		
<400> 5		
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gcccttaact ccgcccagg ttccggccat ggctgactaa ttttttttat	180	
ttatgcagag gccgaggccg ctcggccctc tgagctattc cagaagtgtt gaggaggctt	240	
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<210> 6		
<211> 32		
<212> DNA		
<213> Artificial Sequence		
<220>		
<221> Primer_Bind		
<223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Xho I restriction site.		
<400> 6		
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<210> 7		
<211> 31		
<212> DNA		
<213> Artificial Sequence		
<220>		
<221> Primer_Bind		
<223> Synthetic primer complementary to human genomic EGR-1 promoter sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a Hind III restriction site.		
<400> 7		
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<210> 8		

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<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
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<210> 9
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
(GGGGACTTCCC), 18 nucleotides complementary to the 5' end of the
SV40 early promoter sequence, and a XhoI restriction site.

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gcggcctcg a gggactttc cggggactt tccgggact ttccggact ttccatcctg 60
ccatctcaat tag 73

<210> 10
<211> 256
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes NF-KB
binding sites.

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cagttccgccc catttcgc cccatggctg actaattttt ttatttatg cagaggccga 180
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ctttgcaaa aagctt 256

<210> 11
<211> 1388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1388)..(1388)
<223> n equals a,t,g, or c

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gatagccatg tgtgagccctg aatttggca tgacaaggcc agggagccga gcgtgggtgg 180
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gctgctgcag ccggccctgg cccacgggt ggcttgggg ctcgtattt ccacgcgtgg 360
aatatcagt ggtggacact tcaaccctgc ggtgtccctg gcagccatgc tgatcgagg 420
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ctttgtgaca gtccaggagc aggggcaggt ggcaggggcg ttgggtggcag agatcatcct 600
gacgacgcgt ctggccctgg ctgtatgcat ggggtccatc aatgagaaga caaaggcccc 660
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gtctggaggc tgcatgaatc cggccctgtc ttttgacat ggggtggcgg ccaaccactg 780
gaacttccac tggatctact ggctgggccc actcctggct ggcctgctt ttggactgct 840
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aaaaaaaaan						1388

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<211> 1478  
<212> DNA  
<213> Homo sapiens

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atagcgaaca	act	ggga	acttcttgc	tgcata	tttgcata	480
catttaattt	cg	gat	ccctt	tttgcata	tttgcata	540
gggattccgt	tgt	cttgg	gtt	tttgcata	tttgcata	600
acagtgtt	tag	gtgt	tttgcata	tttgcata	tttgcata	660
tcaatggaa	aaac	cgca	aat	tttgcata	tttgcata	720
aggatctt	ttgg	gttcc	tttgcata	tttgcata	tttgcata	780
ttgttgcatt	aa	tttgcata	tttgcata	tttgcata	tttgcata	840
ttcttttagt	gg	cttattt	tttgcata	tttgcata	tttgcata	900
tggatgtt	gaa	aaat	tttgcata	tttgcata	tttgcata	960
tagaaaataa	tg	cccc	cagg	tttgcata	tttgcata	1020
tcgtgtcaag	ag	taat	ggg	tttgcata	tttgcata	1080
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tttttacat	aag	caag	tttgcata	tttgcata	tttgcata	1260
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agtacatgaa	cta	atgt	tttgcata	tttgcata	tttgcata	1380
actttttgc	cattt	ggat	tttgcata	tttgcata	tttgcata	1440
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<210> 13  
<211> 1684  
<212> DNA  
<213> Homo sapiens

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<222> (1)..(1)  
<223> n equals a,t,g, or c

<220>  
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<222> (18)..(18)  
<223> n equals a,t,g, or c

<220>  
<221> misc\_feature  
<222> (63)..(63)  
<223> n equals a,t,g, or c

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aaggaggctt	catc	cttct	ctcat	cctcg	ctgtgtct	ccgttcaggt
catgtacgc	ctgt	tatt	tgac	ctgt	tttgcata	cata
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aaaa						1684

&lt;210&gt; 14

&lt;211&gt; 1173

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

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&lt;211&gt; 1013

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

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&lt;210&gt; 16

&lt;211&gt; 1616

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 16

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&lt;211&gt; 963

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 17

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&lt;210&gt; 18

&lt;211&gt; 1369

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 18

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&lt;211&gt; 1298

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 19

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&lt;210&gt; 20

&lt;211&gt; 1967

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 929

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 762

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 35

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&lt;211&gt; 2791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<213> Homo sapiens

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&lt;210&gt; 39

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 39

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aaaaaaaaaa	aaaa					374

&lt;210&gt; 40

&lt;211&gt; 1410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 40

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aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa				1410

&lt;210&gt; 41

&lt;211&gt; 1493

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 41

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<212> DNA  
<213> *Homo sapiens*

<400> 43

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<211> 986

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

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<400> 44

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gcagagagta	aaaaaacatga	cctggtagaa	ggaaagagagg	caaaggaaac	tgggtgggga	1140
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aagctttac	aaatgttatt	agtgtccctt	tttatttcta	atgccttgtc	ctcttaaaag	1560
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<212> DNA  
<213> *Homo sapiens*

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gactggaaaca	gactgtaat	atagcagaag	gttccaagaa	ctctgtgtc	tgacctagaa		360
gaggcacagt	tctctctact	ggaaagaaaa	cgatgttagcc	gattgcacaa	gggtgccaag		420
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actctggccc	ccatgcgtga	ataccctgt	tgatgtctgt	gtctttccgg	tttgtctcta		600
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<210> 49  
<211> 511  
<212> DNA  
<213> Homo sapiens
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<220>
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<222> (1)..(1)
<223> n equals a,t,q, or c
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gaagccttaa atttgtgctc agtcagtgc ctgtgaatgg gtataaaagag acaactaaga 180
atctgtatcat tgctctggtaa qaqagactqa cggtacaaag tgcaatggta catgcattct 240

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gtgagacaga aattcatgga ggagaactgg aagagattca cctggatagg tagcctgggg	300
cataaagagt aggccttagga agccctaagg acattaggat ttattttag agatgatggt	360
tctttgtta gggtgacagc agggtggta tgaagagagg tcttaatcta aatatatttt	420
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aaagatttt gagccaagca caatgactca t	511
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<211> 817	
<212> DNA	
<213> Homo sapiens	
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<223> n equals a,t,g, or c	
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ccaggcttttggcttggtac ctcagggttc tcacaggggaa ggcttggaaat ggaacaacagc	300
acatgtgtaa ctgttgtgtt gacagtctaa ttggtagaaaa atcagcgaac aaagaaggcag	360
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tccttcagag aaggtagcac tccctgagac cggaaatggca gaaagaagtc catctgcct	480
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aagaagtgc cgcgtactt gagagagagg ttgtcggtt caggtgctga atgtccttat	600
aaaagggtttagatatttcgag catctctatc aatacattttt aatgctgaga gctttccctt	660
ccagaagctc atgtcattttt caacacacac ttctattttt ctttatgttag tttctaaaaaa	720
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<212> DNA	
<213> Homo sapiens	
<400> 51	
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gaacccccatgtgtgtggaga ctgttaggggtt agagcacaca attatttgcat tcatttctga	240
gtgtatctcac agatttttttt tcttgcgtttt ttgtttttt ttgacaactt ctttcccac	300
gttccttgca attctattctt ctcacccatca ctttactatt tttttttttt ttgttgcgtt ggaccaggat	360
aattcaggca aggttacctt gtaaaacttga attggccaca cccatgttg tcacccagct	420
ggctatgaag tgaataatgg tactgaaatgtt aaaccttgaag acctttctca gatctat	480
aagtctgagt ctgaccaacc atggaaaata ttgcacatga attaatgttag agaactataa	540
agcatttttgc acagctccaa gaaaaatcat ctactctatg caggagatattt gtttagagac	600
ctctcagaaaaa aacttgcctt gtttgggtt acacagtacc attttatct tctgaaaata	660
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<210> 52	
<211> 1417	
<212> DNA	
<213> Homo sapiens	

<220>  
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<222> (1378)..(1378)  
<223> n equals a,t,g, or c

<220>  
<221> misc\_feature  
<222> (1392)..(1392)  
<223> n equals a,t,g, or c

<220>  
<221> misc\_feature  
<222> (1399)..(1399)  
<223> n equals a,t,g, or c

<220>  
<221> misc\_feature  
<222> (1404)..(1404)  
<223> n equals a,t,g, or c

<400> 52

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aaggaactaa	gtgagtacat	ctccagttgc	ccatgaaagc	ataagtttg	tttcctcagc	180
tgaggcaagt	ggtagagtt	acaggataac	gaagtaacat	gtaaaaggca	ggacgcacat	240
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actgactgac	tacaggggct	gattgtgaag	cacgaggaac	cccatgtgt	tggagactgt	360
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gtgtttgtt	tgcttttga	caactgctc	tcccacgttc	cttgcattt	tattctctca	480
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<210> 53  
<211> 2793  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (2793)..(2793)  
<223> n equals a,t,g, or c

<400> 53

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<210> 54  
<211> 393  
<212> DNA  
<213> *Homo sapiens*

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<220>
<221> misc_feature
<222> (214)..(214)
<223> n equals a,t,g, or c
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<400> 54  
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gaatctcccc acccaccac actgcagcag gctgcggctg gccgacttgt taattgcccga 180  
gcaggaaacac agcagcaagc tgccggccac cctnacttg tacagttgat ggctgttgt 240  
ctctcccaagg accttagagaa aaccgcstt gtgtacgagc gcatacaact cggcacattg 300  
ttcatgtcct tcatgaacgr gtaaaactgcgttccgtgg rttttcaaaa aaaaaaaaaaa 360  
aaaaaaaaaa aaaaaaaaaaag ctcggggatq qgc 393

<210> 55  
<211> 261  
<212> PRT  
<213> Homo sapiens

<400> 55 Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys

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Arg Phe Val Gln Pro Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe			
35	40	45	
Ile Phe Ile Gly Cys Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly			
50	55	60	
Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile			
65	70	75	80
Ala Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser			
85	90	95	
Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro			
100	105	110	
Tyr Trp Val Ser Gln Leu Leu Gly Met Leu Gly Ala Ala Leu Ala			
115	120	125	
Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala			
130	135	140	
Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala			
145	150	155	160
Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala			
165	170	175	
Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe			
180	185	190	
Ala Val Thr Val Asp Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys			
195	200	205	
Met Asn Pro Ala Arg Ala Phe Gly Pro Ala Val Val Ala Asn His Trp			
210	215	220	
Asn Phe His Trp Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu			
225	230	235	240
Val Gly Leu Leu Ile Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu			
245	250	255	
Ile Leu Lys Ala Gln			
260			

<210> 56  
<211> 310  
<212> PRT  
<213> Homo sapiens

<400> 56			
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Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr			
35	40	45	

Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro  
 50 55 60  
 Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn  
 65 70 75 80  
 Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr  
 85 90 95  
 His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser  
 100 105 110  
 Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu  
 115 120 125  
 Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln  
 130 135 140  
 Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu  
 145 150 155 160  
 Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser  
 165 170 175  
 Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys  
 180 185 190  
 Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met  
 195 200 205  
 Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe  
 210 215 220  
 Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr  
 225 230 235 240  
 Leu Val Pro Leu Lys Pro Phe Leu Gly Ile Val Val Glu Val Ile Leu  
 245 250 255  
 Leu Val Ala Ile Ile Leu Phe Cys Glu Met His Thr Gln Lys Lys Lys  
 260 265 270  
 Met His Met Asp Asp Gly Lys Glu Phe Glu Gln Val Glu Gln Leu Lys  
 275 280 285  
 Ser Asp Asp Ser Asn Gly Ile Glu Asn Asn Ala Pro Arg His Arg Lys  
 290 295 300  
 Asn Glu Ala Met Ser Gln  
 305 310

<210> 57  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
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 Cys Arg Ser Gly His Ser Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu  
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Thr Cys Asn Lys Thr Thr Val Cys Ser Val Asn His Asp Ala Cys Leu  
 35 40 45

Leu Val Lys Ala Asp Pro Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe  
 50 55 60

Asp Asp Cys Ser Tyr Leu Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys  
 65 70 75 80

Leu Gln Tyr Ser Cys Cys Gln Lys Asp Leu Cys Asn Gly Ser Ala Arg  
 85 90 95

Val Ser Gly Met Thr Ala Leu Met Leu Leu Pro Leu Leu Ala Ala Ala  
 100 105 110

Leu Thr Leu Cys Leu  
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<210> 58  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 58  
 Met His Ile Trp Val Cys Thr Phe Leu Phe Ile Ile His Phe Ser Pro  
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Phe Ser Ile Lys Glu His Ala Leu Gly Glu Leu Leu Ile Ala His Gln  
 20 25 30

Ser Gly Arg Gln His Ser Ile Leu Leu Cys Leu Leu Ser Pro Pro Val  
 35 40 45

Glu Val Phe Leu Leu Lys Gln Arg Arg Asn Arg Gln Ile Arg Leu Ala  
 50 55 60

Leu Leu Glu Met Trp Ser Arg Phe Leu Tyr Ser Gln Ala Pro Lys Lys  
 65 70 75 80

Ala Tyr Ile Gly Trp Ala Arg Ser Thr Pro Pro Glu Ser His Lys Ser  
 85 90 95

Ala Lys Ser Cys Phe Pro Cys Lys Gly Val Val Gln Trp Gly Thr Pro  
 100 105 110

Asp Val Gly Gly Lys Gln Glu Asp Phe Arg Val Glu Leu His Ser Asn  
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Leu Ser Ala Ala Ser Thr Met  
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<210> 59  
 <211> 257  
 <212> PRT  
 <213> Homo sapiens

<400> 59  
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 Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu  
     50                        55                        60  
 Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu  
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 Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His  
     85                        90                        95  
 Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu  
     100                       105                       110  
 Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Phe Gly Leu Thr  
     115                       120                       125  
 Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser  
     130                       135                       140  
 Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val  
     145                       150                       155                       160  
 Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu  
     165                       170                       175  
 Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu  
     180                       185                       190  
 Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu  
     195                       200                       205  
 Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys  
     210                       215                       220  
 Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser  
     225                       230                       235                       240  
 Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro  
     245                       250                       255  
 Gln

<210> 60  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 60  
 Met Tyr Ser Phe Gln Lys Glu Ala Thr Phe Leu Leu Pro Ser Leu Phe  
     1                       5                           10                       15

Leu Val Ser Ser Pro Arg Leu Ala Ile Ala Ile Gly Ile Val Met Ala  
     20                       25                       30

Ser Ile Leu Ser Leu Leu His Pro Tyr Leu Leu Leu Cys Asp Phe Ala  
     35                       40                       45

Ala Pro Leu Ile Lys Glu Ala Glu Pro Pro Leu Pro Pro Ile Gly Ala  
     50                       55                       60

Gly Phe Glu Ser Asn Arg Met Lys  
65 70

<210> 61  
<211> 84  
<212> PRT  
<213> Homo sapiens

<400> 61  
Val Ser Arg Arg Gln Ala Arg Arg Met Val Thr Glu Thr Ser Arg Arg  
1 5 10 15  
Arg Arg Ile Gln Glu Leu Glu Arg Arg Arg Arg Phe Val Glu Ala  
20 25 30  
Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro  
35 40 45  
His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala  
50 55 60  
Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe  
65 70 75 80  
Ile Asn Arg Glu

<210> 62  
<211> 216  
<212> PRT  
<213> Homo sapiens

<400> 62  
Met Asp Phe Glu Phe Ala Ala Trp Gln Met Leu Tyr Leu Phe Thr Ser  
1 5 10 15  
Pro Gln Arg Val Tyr Arg Asn Phe His Tyr Arg Lys Gln Thr Lys Asp  
20 25 30  
Gln Trp Ala Arg Asp Asp Pro Ala Phe Leu Val Leu Leu Ser Ile Trp  
35 40 45  
Leu Cys Val Ser Thr Ile Gly Phe Gly Phe Val Leu Asp Met Gly Phe  
50 55 60  
Phe Glu Thr Ile Lys Leu Leu Leu Trp Val Val Phe Ile Asp Cys Val  
65 70 75 80  
Gly Val Gly Leu Leu Ile Ser Thr Leu Met Trp Phe Ile Ser Asn Lys  
85 90 95  
Tyr Leu Val Lys Arg Gln Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr  
100 105 110  
Ala Phe Asp Val His Leu Asn Ala Phe Tyr Pro Leu Leu Val Ile Leu  
115 120 125  
His Phe Ile Gln Leu Phe Phe Ile Asn His Val Ile Leu Thr Asp Thr  
130 135 140  
Phe Ile Gly Tyr Phe Val Gly Asn Thr Leu Trp Leu Val Ala Val Gly  
145 150 155 160

Tyr	Tyr	Ile	Tyr	Val	Thr	Phe	Leu	Gly	Tyr	Ser	Ala	Leu	Pro	Phe	Leu
				165					170						175
Lys	Asn	Thr	Val	Ile	Leu	Leu	Tyr	Pro	Phe	Ala	Pro	Leu	Ile	Leu	Leu
				180				185							190
Tyr	Gly	Leu	Ser	Leu	Ala	Leu	Gly	Trp	Asn	Phe	Thr	His	Thr	Leu	Cys
				195				200							205
Ser	Phe	Tyr	Lys	Tyr	Arg	Val	Lys								
				210			215								

<210> 63  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 63															
Met	Met	Val	Ser	Cys	Ala	Cys	Glu	His	Leu	Leu	Glu	Leu	Arg	Gly	Leu
1					5				10						15
Thr	Thr	Ser	Thr	Arg	Trp	Pro	Trp	Leu	Val	Pro	His	Thr	Gly	Leu	Val
					20				25						30
Leu	Lys	Ile	Arg	Ser	Pro	Arg	Gln	Gly	Glu	Pro	Gly	Ala	Pro	Pro	Leu
							35		40				45		
Ser	Val	Cys	Leu	Ser	Pro	Val	Val	Ser	Leu	Cys	Cys	Cys	Leu	Cys	Leu
						50		55				60			
Cys	Phe	Cys	Leu	Ser	Val	Ala	Met	Ser	Leu	Val	Ile	Phe	Leu	Cys	Pro
						65		70			75				80
Ala	Ala	Ile	Ser	Ala	Leu	Val	Thr	Ser	Thr	Leu	Leu	Ser	Pro	Arg	Asp
						85			90					95	
Ala	Thr	His	Trp	Gly	Ser	Val	Gly	Glu	Ile	Ala	Leu	Gly	Pro	His	Ala
						100		105							110
Ser	Ile	Pro	Gly	Trp	Leu	Cys	Leu	Pro	Val	Ser	Leu	His	Val	Ser	Pro
						115		120							125
Cys	Val	Phe	Leu	Ser	Val	Ser	Leu	Thr	Gly	Arg	Asp	Ala	Glu		
							130		135				140		

<210> 64  
<211> 367  
<212> PRT  
<213> Homo sapiens

<400> 64															
Met	Ser	Ser	Asn	Gly	Ile	Pro	Glu	Cys	Tyr	Ala	Glu	Asp	Glu	Phe	
1					5					10					15
Ser	Gly	Leu	Glu	Thr	Asp	Thr	Ala	Val	Pro	Thr	Glu	Glu	Ala	Tyr	Val
					20			25							30
Ile	Tyr	Asp	Glu	Asp	Tyr	Glu	Phe	Glu	Thr	Ser	Arg	Pro	Pro	Thr	Thr
						35		40							45
Thr	Glu	Pro	Ser	Thr	Thr	Ala	Thr	Thr	Pro	Arg	Val	Ile	Pro	Glu	Glu

50

55

60

Gly Ala Ile Ser Ser Phe Pro Glu Glu Phe Asp Leu Ala Gly Arg  
 65 70 75 80

Lys Arg Phe Val Ala Pro Tyr Val Thr Tyr Leu Asn Lys Asp Pro Ser  
 85 90 95

Ala Pro Cys Ser Leu Thr Asp Ala Leu Asp His Phe Gln Val Asp Ser  
 100 105 110

Leu Asp Glu Ile Ile Pro Asn Asp Leu Lys Lys Ser Asp Leu Pro Pro  
 115 120 125

Gln His Ala Pro Arg Asn Ile Thr Val Val Ala Val Glu Gly Cys His  
 130 135 140

Ser Phe Val Ile Val Asp Trp Asp Lys Ala Thr Pro Gly Asp Val Val  
 145 150 155 160

Thr Gly Tyr Leu Val Tyr Ser Ala Ser Tyr Glu Asp Phe Ile Arg Asn  
 165 170 175

Lys Trp Ser Thr Gln Ala Ser Ser Val Thr His Leu Pro Ile Glu Asn  
 180 185 190

Leu Lys Pro Asn Thr Arg Tyr Tyr Phe Lys Val Gln Ala Gln Asn Pro  
 195 200 205

His Gly Tyr Gly Pro Ile Ser Pro Ser Val Ser Phe Val Thr Glu Ser  
 210 215 220

Asp Asn Pro Leu Leu Val Val Arg Pro Pro Gly Gly Glu Pro Ile Trp  
 225 230 235 240

Ile Pro Phe Ala Phe Lys His Asp Pro Ser Tyr Thr Asp Cys His Gly  
 245 250 255

Arg Gln Tyr Val Lys Arg Thr Trp Tyr Arg Lys Phe Val Gly Val Val  
 260 265 270

Leu Cys Asn Ser Leu Arg Tyr Lys Ile Tyr Leu Ser Asp Asn Leu Lys  
 275 280 285

Asp Thr Phe Tyr Ser Ile Gly Asp Ser Trp Gly Arg Gly Glu Asp His  
 290 295 300

Cys Gln Phe Val Asp Ser His Leu Asp Gly Arg Thr Gly Pro Gln Ser  
 305 310 315 320

Tyr Val Glu Ala Leu Pro Thr Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg  
 325 330 335

Gln Glu Pro Val Arg Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr  
 340 345 350

Tyr Val Gly Trp Tyr Glu Cys Gly Val Ser Ile Pro Gly Lys Trp  
 355 360 365

&lt;210&gt; 65

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 65  
 Met Met Tyr Cys Ile Leu Lys Tyr Ser Asn Cys Ala Phe Leu Tyr His  
 1 5 10 15  
 Leu Gln Tyr Glu Lys Cys Gln Tyr Leu Val Pro Phe Ser Gly Thr Ile  
 20 25 30  
 Arg Phe Leu Leu Thr Leu Phe Ser Pro Leu Thr His Val Ile Ser His  
 35 40 45  
 Ser Asn Gln Glu Ser Arg Glu  
 50 55

<210> 66  
<211> 46  
<212> PRT  
<213> Homo sapiens  
<400> 66  
 Met Thr Leu Asn Val Val Asp Ala Ile Ser Ala Cys Gln Arg Gly Gly  
 1 5 10 15  
 Phe Leu Gln Ser Val Gln Ser Thr Glu Thr Met Val Arg Val Val Phe  
 20 25 30  
 Leu Ile Leu Phe Leu Val Gly Gln Gln Glu Pro Phe Pro Ile  
 35 40 45

<210> 67  
<211> 49  
<212> PRT  
<213> Homo sapiens  
<400> 67  
 Met Ser Thr Ile Ile Met Val Leu Tyr Ser Arg Ser Lys Cys Ile His  
 1 5 10 15  
 Phe Ser Tyr Leu Thr Glu Asn Leu Tyr Leu Leu Thr Asn Ile Ser Leu  
 20 25 30  
 Val Pro Pro Ser Pro Pro Leu Val Thr Thr Ile Ile Phe Phe Ser Phe  
 35 40 45  
 Phe

<210> 68  
<211> 50  
<212> PRT  
<213> Homo sapiens  
<400> 68  
 Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala  
 1 5 10 15  
 Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser  
 20 25 30  
 Leu Gly Ser His Pro Arg Ala Phe Phe Ala Ser Arg Ser Gly Asp Leu  
 35 40 45

Leu Gln  
50

<210> 69  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 69  
Met Leu Leu His Phe Cys Tyr Ser Ser Tyr Gln Ser Thr Pro Ile Pro  
1 5 10 15

Gln Cys Cys Phe Ile Leu Phe Val Cys Leu Phe Val Phe Glu Val Glu  
20 25 30

Ser Val Thr Gln Ala Gly Val His Thr Cys Asn Pro Ser Tyr Ser Gly  
35 40 45

Gly

<210> 70  
<211> 94  
<212> PRT  
<213> Homo sapiens

<400> 70  
Gly Pro Leu Pro Phe Leu Phe Ser Leu Tyr Pro Pro Pro Lys Arg Ala  
1 5 10 15

Gln Lys Lys Val Phe Ile Asn Ile Phe Gly Val Gly Glu Ile Gln Thr  
20 25 30

Ser Gln Arg Ile Arg Tyr Pro Gln Leu Lys Cys Thr Gly Thr Phe Val  
35 40 45

Ser Glu Phe His Phe Gln Ser Leu Pro Tyr Ile Gly Asn Cys Arg Ser  
50 55 60

Glu Leu Val Glu Val Ser Ser Cys Glu Thr Leu Glu Arg Lys Gln Lys  
65 70 75 80

Pro His Ala Thr Arg Ser Gly Leu Leu Cys Arg Cys Leu Phe  
85 90

<210> 71  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 71  
Met Thr Met Leu Gln Val Tyr Val Leu Ile Pro Leu Phe Val Ile Ile  
1 5 10 15

Leu Glu Cys Thr Pro Thr Asn Tyr Lys Lys Glu Lys Val Asn Cys Lys  
20 25 30

Lys Ala Ser Gly Arg Ser Phe Arg Arg His Ser Arg Arg Arg His Cys  
35 40 45

Tyr His Arg Arg  
50

<210> 72  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 72  
 Met Arg Gly Lys Phe Pro His Asp Leu Leu Cys Phe Leu Ile Lys Leu  
 1 5 10 15

Leu Cys Pro Thr Ile Ala Gly Ser Ala Tyr Gly Cys Cys Asn Val Gly  
 20 25 30

Ser Ala Val Ser Cys Ser Tyr His Phe  
 35 40

<210> 73  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 73  
 Met Arg Gly Leu Ser Gln Phe Tyr Gly Phe Lys Tyr His Leu Asn Ala  
 1 5 10 15

Trp Asp Thr Gln Met Tyr Ile Pro Asn Ser Asp Cys Pro Pro Asn Ser  
 20 25 30

Lys Leu Ile Tyr Pro Asn Tyr Leu Phe Gln Ser Pro Leu Gly Tyr Leu  
 35 40 45

Ile Ile Met Ser His Leu Asp His Ala Asn Ser Ser Gln Ser Arg  
 50 55 60

<210> 74  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 74  
 Met Arg Cys Thr Pro Gly Phe Gly Leu Gly Thr Ser Gly Phe Ser Gln  
 1 5 10 15

Gly Arg Leu Glu Val Glu Thr Ser Thr Cys Val Thr Val Val  
 20 25 30

<210> 75  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 75  
 Met Thr Tyr Ser Phe Trp Gln Lys Lys Phe Pro Phe Pro Arg Gln Ile  
 1 5 10 15

Lys Leu Val Gln Gly Arg Ile Leu Ser Thr Glu Ile Leu Gly Asn Pro  
 20 25 30

Ala Arg Glu Arg Glu Ser Leu Leu Leu Cys Phe Leu Leu Pro  
 35 40 45

<210> 76

<211> 71

<212> PRT

<213> Homo sapiens

<400> 76

Met Val Gln Cys Pro Arg Thr Ser Lys Asp Gly Asp Leu Leu Ser Pro  
 1 5 10 15

Ser Leu Arg Asp Glu Arg Arg His Trp Leu Cys Arg Arg Pro Gly Glu  
 20 25 30

Arg Trp Asn Trp Arg Trp Gly Cys Trp Gln Glu Leu Trp Pro Gln Lys  
 35 40 45

Glu Gly Ser Ser His Cys Leu Thr Cys Asp Gln Thr Arg Arg Glu Gln  
 50 55 60

Gly Trp Trp Gly Ser Asp Thr  
 65 70

<210> 77

<211> 51

<212> PRT

<213> Homo sapiens

<400> 77

Met Phe Arg Asp Leu Ser Glu Leu Ala Trp Phe Glu Gly Thr Gln  
 1 5 10 15

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys  
 20 25 30

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr  
 35 40 45

Cys Leu Leu  
 50

<210> 78

<211> 107

<212> PRT

<213> Homo sapiens

<400> 78

Met Pro Leu Gly Cys Arg Glu Glu Ala Gly Gly Val Met Gly Met Gly  
 1 5 10 15

Ser Gly Arg Gly Arg Glu Gly Pro Ser Thr Lys Ala Trp Glu Met Arg  
 20 25 30

Gly Gly Gly Gly Arg Ala Gly Glu Ala Lys Ser Gln Pro Trp Arg Glu  
 35 40 45

His	Pro	Gly	Ala	Ser	Val	Ser	Gly	Tyr	Thr	Gln	His	Phe	Ala	Thr	Cys
50						55					60				
Gly	Pro	Ala	Gly	Ala	Glu	Asp	Gly	Gly	Glu	Glu	Ala	Ser	Ser	Pro	Cys
65					70					75					80
Val	Tyr	Cys	Arg	Gln	Lys	Gly	Leu	Val	Phe	Trp	Phe	Trp	Gly	Phe	Cys
									85		90				95
Phe	Val	Cys	Val	Leu	Phe	Gly	Leu	Phe	Val	Phe					
									100		105				

<210> 79  
<211> 105  
<212> PRT  
<213> *Homo sapiens*

<400> 79  
Met Glu Ala Gly Glu Pro Gly Gly Leu Gly Gln Pro Trp Asp Gly Ser  
1 5 10 15

Trp Ile Glu Glu Ser Arg Gly Val Met Arg Val Pro Ser Gly Leu Gly  
20 25 30

Ser Leu Leu Leu Val Ser Asp Pro Pro Pro Phe Ser Ser Gln Ala Leu  
35 40 45

Gly Ala Pro Gly Ser Glu Asp Ser Trp Glu Ser Ser Leu Arg Gln Val  
50 55 60

Gln Gly Gln Ser Ser Asp Pro Gly Pro Gly Leu Leu Trp Val Pro Met  
65 70 75 80

Asn Ser Ala Ser Gly Ser Glu Gln Phe Pro Ala Pro Leu Pro Glu Pro  
85 90 95

Ser Val Leu Trp Asn Pro Trp Ala Gly  
100 105

<210> 80  
<211> 67  
<212> PRT  
<213> *Homo sapiens*

<400> 80  
Met Cys Val Leu Met Ser Tyr Phe Gln Ser Cys Ala Leu Asn Gln Ser  
1 5 10 15

Trp His Thr Gly Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly  
20 25 30

Gln Lys Ile Glu Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys  
35 40 45

Leu Lys Arg Leu Ile Ile Leu Lys Lys Lys Asn Arg Pro Thr Arg Pro  
50 55 60

Asp Tyr Met  
65

<210> 81  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 81  
Met Leu Trp Arg Cys Phe Val Ile Phe Lys Ile Cys Pro Tyr Cys Leu  
1 5 10 15  
Phe Lys Thr Pro Lys Ile Met Asn Ser Glu Thr His Pro Ala Gln Arg  
20 25 30  
Val Leu Asp Lys Gly Leu  
35

<210> 82  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 82  
Gly Thr Arg Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly  
1 5 10 15  
Ala Gly Ile Phe Phe Ala Ile Ile Leu Val Thr Gly Ala Val Ala Leu  
20 25 30  
Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln  
35 40 45  
His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln  
50 55 60  
Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala  
65 70 75 80  
Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln  
85 90 95  
Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu  
100 105

<210> 83  
<211> 124  
<212> PRT  
<213> Homo sapiens

<400> 83  
His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu Leu Ser  
1 5 10 15  
Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly Ser Arg  
20 25 30  
Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys Ser Arg  
35 40 45  
Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser Ser Lys  
50 55 60  
Leu Arg His Pro Tyr Leu Leu Gln Leu Met Ala Val Cys Leu Ser Gln  
65 70 75 80

Asp Leu Glu Lys Thr Arg Leu Val Tyr Glu Arg Ile Thr Ile Gly Thr  
 85 90 95

Leu Phe Ser Val Leu His Glu Arg Val Asn Cys Cys Phe Arg Gly Phe  
 100 105 110

Ser Lys  
 115 120

<210> 84

<211> 261

<212> PRT

<213> Homo sapiens

<400> 84

Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys  
 1 5 10 15

Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu  
 20 25 30

Arg Phe Val Gln Pro Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe  
 35 40 45

Ile Phe Ile Gly Cys Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly  
 50 55 60

Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile  
 65 70 75 80

Ala Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser  
 85 90 95

Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro  
 100 105 110

Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu Ala  
 115 120 125

Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala  
 130 135 140

Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala  
 145 150 155 160

Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala  
 165 170 175

Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe  
 180 185 190

Ala Val Thr Val Asp Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys  
 195 200 205

Met Asn Pro Ala Arg Ala Phe Gly Pro Ala Val Val Ala Asn His Trp  
 210 215 220

Asn Phe His Trp Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu  
 225 230 235 240

Val Gly Leu Leu Ile Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu  
 245 250 255

Ile Leu Lys Ala Gln  
260

<210> 85  
<211> 310  
<212> PRT  
<213> Homo sapiens

<400> 85  
Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser  
1 5 10 15  
Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met  
20 25 30  
Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr  
35 40 45  
Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro  
50 55 60  
Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn  
65 70 75 80  
Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr  
85 90 95  
His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser  
100 105 110  
Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu  
115 120 125  
Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln  
130 135 140  
Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu  
145 150 155 160  
Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser  
165 170 175  
Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys  
180 185 190  
Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met  
195 200 205  
Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe  
210 215 220  
Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr  
225 230 235 240  
Leu Val Pro Leu Lys Pro Phe Leu Gly Ile Val Val Glu Val Ile Leu  
245 250 255  
Leu Val Ala Ile Ile Leu Phe Cys Glu Met His Thr Gln Lys Lys Lys  
260 265 270  
Met His Met Asp Asp Gly Lys Glu Phe Glu Gln Val Glu Gln Leu Lys  
275 280 285  
Ser Asp Asp Ser Asn Gly Ile Glu Asn Asn Ala Pro Arg His Arg Lys

† PROTEIN SEQUENCES FROM PROTEIN BANK

290

295

300

Asn Glu Ala Met Ser Gln  
 305                    310

<210> 86  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 86  
Met His Ile Trp Val Cys Thr Phe Leu Phe Ile Ile His Phe Ser Pro  
1                        5                        10                        15  
Phe Ser Ile Lys Glu His Ala Leu Gly Glu Leu Leu Ile Ala His Gln  
20                      25                        30  
Ser Gly Arg Gln His Ser Ile Leu Leu Cys Leu Leu Ser Pro Pro Val  
35                      40                        45  
Glu Val Phe Leu Leu Lys Gln Arg Arg Asn Arg Gln Ile Arg Leu Ala  
50                      55                        60  
Leu Leu Glu Met Trp Ser Arg Phe Leu Tyr Ser Gln Ala Pro Lys Lys  
65                      70                        75                        80  
Ala Tyr Ile Gly Trp Ala Arg Ser Thr Pro Pro Glu Ser His Lys Ser  
85                      90                        95  
Ala Lys Ser Cys Phe Pro Cys Lys Gly Val Val Gln Trp Gly Thr Pro  
100                    105                        110  
Asp Val Gly Gly Lys Gln Glu Asp Phe Arg Val Glu Leu His Ser Asn  
115                    120                        125  
Leu Ser Ala Ala Ser Thr Met  
130                    135

<210> 87  
<211> 257  
<212> PRT  
<213> Homo sapiens

<400> 87  
His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile  
1                      5                        10                        15  
Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu  
20                      25                        30  
Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg  
35                      40                        45  
Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu  
50                      55                        60  
Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu  
65                      70                        75                        80  
Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His  
85                      90                        95

Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu  
 100 105 110  
 Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr  
 115 120 125  
 Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser  
 130 135 140  
 Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val  
 145 150 155 160  
 Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu  
 165 170 175  
 Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu  
 180 185 190  
 Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu  
 195 200 205  
 Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys  
 210 215 220  
 Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser  
 225 230 235 240  
 Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro  
 245 250 255  
 Gln

<210> 88  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 88  
 Val Ser Arg Arg Gln Ala Arg Arg Met Val Thr Glu Thr Ser Arg Arg  
 1 5 10 15  
 Arg Arg Ile Gln Glu Leu Glu Glu Arg Arg Arg Xaa Phe Val Glu Ala  
 20 25 30  
 Cys Arg Ala Arg Glu Ala Ala Phe Asp Ala Glu Tyr Gln Arg Asn Pro  
 35 40 45  
 His Arg Val Asp Leu Asp Ile Leu Thr Phe Thr Ile Ala Leu Thr Ala  
 50 55 60  
 Ser Glu Val Ile Asn Pro Leu Ile Glu Glu Leu Gly Cys Asp Lys Phe  
 65 70 75 80  
 Ile Asn Arg Glu

<210> 89  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 89  
His Glu Ile Gln Gly Tyr Tyr Arg Gln Tyr Arg Gln Glu Pro Val Arg  
1 5 10 15  
Phe Gly Asn Ile Gly Phe Gly Thr Pro Tyr Tyr Tyr Val Gly Trp Tyr  
20 25 30  
Glu Cys Gly Val Ser Ile Pro Gly Lys Trp  
35 40

<210> 90  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 90  
Met Met Tyr Cys Ile Leu Lys Tyr Ser Asn Cys Ala Phe Leu Tyr His  
1 5 10 15  
Leu Gln Tyr Glu Lys Cys Gln Tyr Leu Val Pro Phe Ser Gly Thr Ile  
20 25 30  
Arg Phe Leu Leu Thr Leu Phe Ser Pro Leu Thr His Val Ile Ser His  
35 40 45  
Ser Asn Gln Glu Ser Arg Glu  
50 55

<210> 91  
<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 91  
Met Thr Leu Asn Val Val Asp Ala Ile Ser Ala Cys Gln Arg Gly Gly  
1 5 10 15  
Phe Leu Gln Ser Val Gln Ser Thr Glu Thr Met Val Arg Val Val Phe  
20 25 30  
Leu Ile Leu Phe Leu Val Gly Gln Gln Glu Pro Phe Pro Ile  
35 40 45

<210> 92  
<211> 50  
<212> PRT  
<213> Homo sapiens

<400> 92  
Met Leu Asn Phe Leu Trp Gly His Ser Leu Ile Val Pro Ala Ala Ala  
1 5 10 15  
Thr Gly Ala Ser Leu Glu Ala Ala Cys Ala Lys Thr Thr Gln Leu Ser  
20 25 30

Leu Gly Ser His Pro Arg Ala Phe Phe Ala Ser Arg Ser Gly Asp Leu  
 35 40 45

Leu Gln  
 50

<210> 93  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 93  
 Met Pro Gln Ala Thr Tyr Pro Gly Glu Ser Leu Pro Val Leu Leu His  
 1 5 10 15

Glu Phe Leu Ser His Arg Met His Val Pro Leu His Phe Val Thr Ser  
 20 25 30

Val Ser Pro Thr Arg Gln  
 35

<210> 94  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 94  
 Met Arg Cys Thr Pro Gly Phe Gly Leu Gly Thr Ser Gly Phe Ser Gln  
 1 5 10 15

Gly Arg Leu Glu Val Glu Thr Ser Thr Cys Val Thr Val Val  
 20 25 30

<210> 95  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 95  
 Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln  
 1 5 10 15

Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys  
 20 25 30

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr  
 35 40 45

Cys Leu Leu  
 50

<210> 96  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 96  
 Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln

1	5	10	15
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Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys  
                   20                 25                 30

Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr  
                   35                 40                 45

Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu  
                   50                 55                 60

Tyr Glu Leu Phe  
                   65

<210> 97

<211> 63

<212> PRT

<213> Homo sapiens

<400> 97

Met Ser Tyr Phe Gln Ser Cys Ala Leu Asn Gln Ser Trp His Thr Gly  
     1              5                 10                 15

Ser Val Tyr Ile Lys Phe His Leu Ala Thr Asp Gly Gln Lys Ile Glu  
     20             25                 30

Met Pro Ser Tyr Gly Glu Tyr Phe Ser Phe Lys Lys Leu Lys Arg Leu  
     35             40                 45

Ile Ile Leu Lys Lys Asn Arg Pro Thr Arg Pro Asp Tyr Met  
     50             55                 60

<210> 98

<211> 75

<212> PRT

<213> Homo sapiens

<400> 98

Ile Arg His Glu Ser Leu Phe Ile Glu Gly Val Ser Gly Cys Ser Leu  
     1              5                 10                 15

Leu Ser Ala Glu Thr Leu Ser Cys Pro Cys Ser Leu Val Trp Asn Gly  
     20             25                 30

Ser Arg Val Thr Val Lys Glu Leu Asn Leu Pro Thr His Pro His Cys  
     35             40                 45

Ser Arg Leu Arg Leu Ala Asp Leu Leu Ile Ala Glu Gln Glu His Ser  
     50             55                 60

Ser Lys Leu Arg Ala Pro Leu Thr Cys Tyr Ser  
     65             70                 75

<210> 99

<211> 9

<212> PRT

<213> Homo sapiens

<400> 99

His Phe Asn Pro Ala Val Ser Leu Ala

1               5

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<210> 100
<211> 9
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 100
Xaa Xaa Asn Pro Xaa Xaa Xaa Xaa
 1               5

<210> 101
<211> 38
<212> PRT
<213> Homo sapiens

<400> 101
Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys
 1               5               10               15

Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu
 20              25              30

Arg Phe Val Gln Pro Cys
 35

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<210> 102  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 102  
Leu Val Glu Leu Leu Gly Ser Ala Leu Phe Ile Phe Ile Gly Cys Leu  
1 5 10 15

<210> 103  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 103  
Ser Val Ile Glu Asn Gly Thr Asp Thr Gly  
1 5 10

<210> 104  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 104  
Leu Leu Gln Pro Ala Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile  
1 5 10 15

Ala

<210> 105  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 105  
Thr Leu Gly Asn Ile Ser Gly Gly His Phe Asn Pro Ala  
1 5 10

<210> 106  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 106  
Val Ser Leu Ala Ala Met Leu Ile Gly Gly Leu Asn Leu Val Met Leu  
1 5 10 15

Leu

<210> 107

<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 107  
Pro Tyr Trp Val Ser Gln Leu Leu Gly Gly Met Leu Gly Ala Ala Leu  
1 5 10 15  
Ala Lys Ala Val Ser Pro Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala  
20 25 30  
Ala Phe Val Thr Val Gln Glu Gln Gly Gln Val Ala Gly Ala  
35 40 45

<210> 108  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 108  
Leu Val Ala Glu Ile Ile Leu Thr Thr Leu Leu Ala Leu Ala Val Cys  
1 5 10 15

Met

<210> 109  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 109  
Gly Ala Ile Asn Glu Lys Thr Lys Gly Pro  
1 5 10

<210> 110  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 110  
Leu Ala Pro Phe Ser Ile Gly Phe Ala Val Thr Val Asp Ile Leu Ala  
1 5 10 15

Gly

<210> 111  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 111  
Gly Pro Val Ser Gly Gly Cys Met Asn Pro Ala Arg Ala Phe Gly Pro  
1 5 10 15

Ala Val Val Ala Asn His Trp Asn Phe His Trp  
20 25

<210> 112  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 112  
Ile Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu Val Gly Leu Leu  
1 5 10 15  
Ile

<210> 113  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 113  
Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu Ile Leu Lys Ala Gln  
1 5 10 15

<210> 114  
<211> 320  
<212> PRT  
<213> Homo sapiens

<400> 114  
Phe Pro Gly Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser  
1 5 10 15  
Asn Leu Ser Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu  
20 25 30

Thr Ser Leu Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu  
35 40 45

Phe Leu Glu Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro  
50 55 60

Val Glu Lys Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr  
65 70 75 80

Cys Gln Phe Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp  
85 90 95

Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu  
100 105 110

Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln  
115 120 125

Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu Lys Glu Arg Arg Gly  
130 135 140

Thr Phe Asn Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu  
145 150 155 160

Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His  
 165 170 175

Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln  
 180 185 190

Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr  
 195 200 205

Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp  
 210 215 220

Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln  
 225 230 235 240

Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro  
 245 250 255

Phe Leu Gly Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu  
 260 265 270

Phe Cys Glu Met His Thr Gln Lys Lys Met His Met Asp Asp Gly  
 275 280 285

Lys Glu Phe Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly  
 290 295 300

Ile Glu Asn Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln  
 305 310 315 320

<210> 115  
<211> 256  
<212> PRT  
<213> Homo sapiens

<400> 115  
Phe Pro Gly Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser  
 1 5 10 15

Asn Leu Ser Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu  
 20 25 30

Thr Ser Leu Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu  
 35 40 45

Phe Leu Glu Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro  
 50 55 60

Val Glu Lys Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr  
 65 70 75 80

Cys Gln Phe Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp  
 85 90 95

Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu  
 100 105 110

Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln  
 115 120 125

Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly  
 130 135 140

Thr Phe Asn Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu  
 145 150 155 160

Ile Thr Tyr Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His  
 165 170 175

Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln  
 180 185 190

Val Pro Leu Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr  
 195 200 205

Asn Ala Asn Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp  
 210 215 220

Lys Gly Ser Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln  
 225 230 235 240

Glu Ser Val Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro  
 245 250 255

&lt;210&gt; 116

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 116

Phe	Leu	Gly	Ile	Val	Val	Glu	Val	Ile	Leu	Leu	Val	Ala	Ile	Ile	Leu
1				5				10					15		

Phe

&lt;210&gt; 117

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 117

Cys	Glu	Met	His	Thr	Gln	Lys	Lys	Lys	Met	His	Met	Asp	Asp	Gly	Lys
1				5					10				15		

Glu	Phe	Glu	Gln	Val	Glu	Gln	Leu	Lys	Ser	Asp	Asp	Ser	Asn	Gly	Ile
				20				25					30		

Glu	Asn	Asn	Ala	Pro	Arg	His	Arg	Lys	Asn	Glu	Ala	Met	Ser	Gln
							35	40				45		

&lt;210&gt; 118

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 118

Met Met Thr Lys Tyr Ser Asn Leu Ser Leu Glu Ser His Asn Phe Ser  
 1 5 10 15

Leu Thr Ala Ser Pro Leu Thr Ser Leu Pro Ile Pro Glu Val Met Met  
 20 25 30

Thr Lys Tyr Ser Asn Leu Phe Leu Glu Ser His Asn Ile Ser Leu Thr  
 35 40 45

Glu His Ser Ser Val Pro Val Glu Lys Asn Ile Thr Leu Glu Arg Pro  
 50 55 60

Ser Ala Val Glu Leu Thr Cys Gln Phe Thr Thr Ser Gly Asp Val Asn  
 65 70 75 80

Ser Val Asn Val Thr Trp Lys Lys Gly Asp Glu Gln Leu Lys Asn Tyr  
 85 90 95

His Val Ser Ala Thr Glu Gly Ile Leu Tyr Thr Gln Tyr Lys Phe Ser  
 100 105 110

Ile Ile Asn Ser Glu Gln Leu Gly Ser Tyr Ser Cys Phe Phe Glu Glu  
 115 120 125

Glu Lys Glu Arg Arg Gly Thr Phe Asn Phe Gly Val Pro Glu Val Gln  
 130 135 140

Arg Lys Asn Lys Pro Leu Ile Thr Tyr Val Gly Asp Ser Val Val Leu  
 145 150 155 160

Val Cys Lys Cys Arg His Cys Ala Pro Leu Asn Trp Thr Trp Tyr Ser  
 165 170 175

Gly Asn Arg Ser Val Gln Val Pro Leu Asp Val His Met Asn Glu Lys  
 180 185 190

Tyr Ala Ile Asn Gly Thr Asn Ala Asn Glu Thr Arg Leu Lys Ile Met  
 195 200 205

Gln Leu Ser Glu Asp Asp Lys Gly Ser Tyr Trp Cys His Ala Met Phe  
 210 215 220

Gln Leu Gly Glu Ser Gln Glu Ser Val Glu Leu Val Val Ile Ser Tyr  
 225 230 235 240

Leu Val Pro Leu Lys Pro  
 245

<210> 119  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 119  
 Gly His Ser Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu Thr Cys Asn  
 1 5 10 15

Lys Thr Thr Val Cys Ser Val Asn His Asp Ala Cys Leu Leu Val Lys  
 20 25 30

Ala Asp Pro Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe Asp Asp Cys  
 35 40 45

Ser Tyr Leu Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys Leu Gln Tyr

50

55

60

Ser Cys Cys Gln Lys Asp Leu Cys Asn Gly Ser Ala Arg Val Ser Gly  
 65                    70                    75                    80

Met

&lt;210&gt; 120

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 120

Leu Thr Cys Tyr Ala Cys Ile Asp Arg Glu Thr Cys Asn Lys Thr Thr  
 1                    5                    10                    15

Val Cys Ser Val Asn His Asp Ala Cys Leu Leu Val Lys Ala Asp Pro  
 20                    25                    30

Lys Leu Phe Tyr Arg Gln Cys Trp Lys Phe Asp Asp Cys Ser Tyr Leu  
 35                    40                    45

Ser Ile Ser Lys Ala Leu Gly Leu Lys Lys Leu Gln Tyr Ser Cys Cys  
 50                    55                    60

Gln Lys Asp Leu Cys Asn Gly Ser Ala Arg Val Ser Gly Met  
 65                    70                    75

&lt;210&gt; 121

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 121

Leu Asn Ser Arg Asp Ala Ala Arg His Thr Ala Glu Gln Asn Ala Thr  
 1                    5                    10                    15

Asn Thr

&lt;210&gt; 122

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 122

Met Leu Pro Ser Ile Ser Val Asn Ser Pro Met Gln Gly Asn Gly  
 1                    5                    10                    15

&lt;210&gt; 123

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 123

Gly Phe Val Leu Asp Met Gly Phe Phe Glu Thr Ile Lys  
 1                    5                    10

<210> 124  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 124  
Ser Thr Leu Met Trp Phe Ile Ser Asn Lys Tyr Leu Val Lys Arg Gln  
1 5 10 15  
Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr Ala Phe Asp Val His Leu  
20 25 30  
Asn Ala Phe Tyr Pro  
35

<210> 125  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 125  
Leu Thr Asp Thr Phe Ile Gly Tyr Phe Val Gly Asn  
1 5 10

<210> 126  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 126  
Tyr Ser Ala Leu Pro Phe Leu Lys Asn  
1 5

<210> 127  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 127  
Ser Leu Ala Leu Gly Trp Asn Phe Thr His Thr Leu Cys Ser Phe Tyr  
1 5 10 15  
Lys Tyr Arg Val Lys  
20

<210> 128  
<211> 249  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (4)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (5)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (28)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (35)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 128  
Met Leu Pro Xaa Xaa Pro Trp Asn Ser Pro Met Pro Gly Asn Gly Cys  
1 5 10 15  
Trp Xaa Ser Arg Gly Cys Gln Gln Asp Thr Gln Xaa Ser Lys Thr Leu  
20 25 30  
Pro Ile Xaa Glu Lys Thr Phe Ser Phe Ser Gln Met Asp Phe Glu Phe  
35 40 45  
Ala Ala Trp Gln Met Leu Tyr Leu Phe Thr Ser Pro Gln Arg Val Tyr  
50 55 60  
Arg Asn Phe His Tyr Arg Lys Gln Thr Lys Asp Gln Trp Ala Arg Asp  
65 70 75 80  
Asp Pro Ala Phe Leu Val Leu Ser Ile Trp Leu Cys Val Ser Thr  
85 90 95  
Ile Gly Phe Gly Phe Val Leu Asp Met Gly Phe Phe Glu Thr Ile Lys  
100 105 110  
Leu Leu Leu Trp Val Val Phe Ile Asp Cys Val Gly Val Gly Leu Leu  
115 120 125  
Ile Ser Thr Leu Met Trp Phe Ile Ser Asn Lys Tyr Leu Val Lys Arg  
130 135 140  
Gln Ser Arg Asp Tyr Asp Val Glu Trp Gly Tyr Ala Phe Asp Val His  
145 150 155 160  
Leu Asn Ala Phe Tyr Pro Leu Leu Val Ile Leu His Phe Ile Gln Leu  
165 170 175  
Phe Phe Ile Asn His Val Ile Leu Thr Asp Thr Phe Ile Gly Tyr Phe  
180 185 190  
Val Gly Asn Thr Leu Trp Leu Val Ala Val Gly Tyr Tyr Ile Tyr Val  
195 200 205  
Thr Phe Leu Gly Tyr Ser Ala Leu Pro Phe Leu Lys Asn Thr Val Ile  
210 215 220  
Leu Leu Tyr Pro Phe Ala Pro Leu Ile Leu Leu Tyr Gly Leu Ser Leu  
225 230 235 240

Ala Leu Gly Trp Asn Phe Thr His Thr  
245

<210> 129  
<211> 61  
<212> PRT  
<213> Homo sapiens

<400> 129  
Met Met Val Ser Cys Ala Cys Glu His Leu Leu Glu Leu Arg Gly Leu  
1 5 10 15  
Thr Thr Ser Thr Arg Trp Pro Trp Leu Val Pro His Thr Gly Leu Val  
20 25 30  
Leu Lys Ile Arg Ser Pro Arg Gln Gly Glu Pro Gly Ala Pro Pro Leu  
35 40 45  
Ser Val Cys Leu Ser Pro Val Val Ser Leu Cys Cys Cys  
50 55 60

<210> 130  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 130  
Leu Cys Leu Cys Phe Cys Leu Ser Val Ala Met Ser Leu Val Ile Phe  
1 5 10 15  
Leu

<210> 131  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 131  
Cys Pro Ala Ala Ile Ser Ala Leu Val Thr Ser Thr Leu Leu Ser Pro  
1 5 10 15  
Arg Asp Ala Thr His Trp Gly Ser Val Gly Glu Ile Ala Leu Gly Pro  
20 25 30  
His Ala Ser Ile Pro Gly Trp Leu  
35 40

<210> 132  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 132  
Cys Leu Pro Val Ser Leu His Val Ser Pro Cys Val Phe Leu Ser Val  
1 5 10 15

<210> 133  
<211> 8  
<212> PRT  
<213> Homo sapiens

<400> 133  
Ser Leu Thr Gly Arg Asp Ala Glu  
1 5

<210> 134  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 134  
Met Asp Thr Glu Lys Ser Trp Ile Pro Arg Val Trp Leu Ala Leu Ser  
1 5 10 15  
Cys Pro Leu Val Ile Ser Glu Trp Phe Leu Ile Leu Cys Ile His Val  
20 25 30  
Met Arg Gly Lys Phe Pro His Asp Leu Leu Cys Phe Leu Ile Lys Leu  
35 40 45  
Leu Cys Pro Thr Ile Ala Gly Ser Ala Tyr Gly Cys Cys Asn Val Gly  
50 55 60  
Ser Ala Val Ser Cys Ser Tyr His Phe  
65 70

<210> 135  
<211> 88  
<212> PRT  
<213> Homo sapiens

<400> 135  
Met Pro Leu Gly Cys Arg Glu Glu Ala Gly Gly Val Met Gly Met Gly  
1 5 10 15  
Ser Gly Arg Gly Arg Glu Gly Pro Ser Thr Lys Ala Trp Glu Met Arg  
20 25 30  
Gly Gly Gly Arg Ala Gly Glu Ala Lys Ser Gln Pro Trp Arg Glu  
35 40 45  
His Pro Gly Ala Ser Val Ser Gly Tyr Thr Gln His Phe Ala Thr Cys  
50 55 60  
Gly Pro Ala Gly Ala Glu Asp Gly Gly Glu Glu Ala Ser Ser Pro Cys  
65 70 75 80  
Val Tyr Cys Arg Gln Lys Gly Leu  
85

<210> 136  
<211> 16

<212> PRT  
<213> Homo sapiens

<400> 136  
Val Phe Trp Phe Trp Gly Phe Cys Phe Val Cys Val Leu Phe Gly Leu  
1 5 10 15

<210> 137  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 137  
Glu Gln Asp Pro His Ala Ala Gln Pro Cys Leu Thr Arg Gly Trp Pro  
1 5 10 15

Gln Lys Arg Val Gly Glu Ala Gly Gln Gln Gly Leu Ala Glu Ile Ile  
20 25 30

Cys Arg Ala Gln Glu Ala Gly Glu Arg Arg Gln Phe Gln Gly Pro Phe  
35 40 45

Val Arg Gln Val Pro Gly Ala Gln Pro Gly Arg Gln Glu Gly Leu Ser  
50 55 60

Pro Ser Pro Arg Gln Glu Gly Ser Gln Ala Glu Ala Pro Pro Ser Gly  
65 70 75 80

Thr Pro Gln Pro Thr Pro Ala Ala Leu Gly Pro Arg Leu Ile Lys His  
85 90 95

Pro Pro His Gly Arg Gln Leu Tyr Leu Val Asp Arg Lys Ser Ala Ser  
100 105 110

Pro Ile Tyr Asp Gly Thr  
115

<210> 138  
<211> 155  
<212> PRT  
<213> Homo sapiens

<400> 138  
Thr Gly Ala Gln Glu Arg Thr Ser Val Arg Leu Thr Ala Arg Cys Cys  
1 5 10 15

Thr Glu Asn Pro Gln Pro Glu Pro Leu Gly Pro Ala Gln Ala Arg Pro  
20 25 30

Glu Lys Glu Gly Ala Gly Gly Arg Pro Ala Trp Gly Ser Arg Glu Ala  
35 40 45

His Gly Met Glu Ala Gly Glu Pro Gly Gly Leu Gly Gln Pro Trp Asp  
50 55 60

Gly Ser Trp Ile Glu Glu Ser Arg Gly Val Met Arg Val Pro Ser Gly  
65 70 75 80

Leu Gly Ser Leu Leu Leu Val Ser Asp Pro Pro Phe Ser Ser Gln

85

90

95

Ala Leu Gly Ala Pro Gly Ser Glu Asp Ser Trp Glu Ser Ser Leu Arg  
100 105 110

Gln Val Gln Gly Gln Ser Ser Asp Pro Gly Pro Gly Leu Leu Trp Val  
115 120 125

Pro Met Asn Ser Ala Ser Gly Ser Glu Gln Phe Pro Ala Pro Leu Pro  
130 135 140

Glu Pro Ser Val Leu Trp Asn Pro Trp Ala Gly  
145 150 155